

TROPICAL CYCLONE 08B

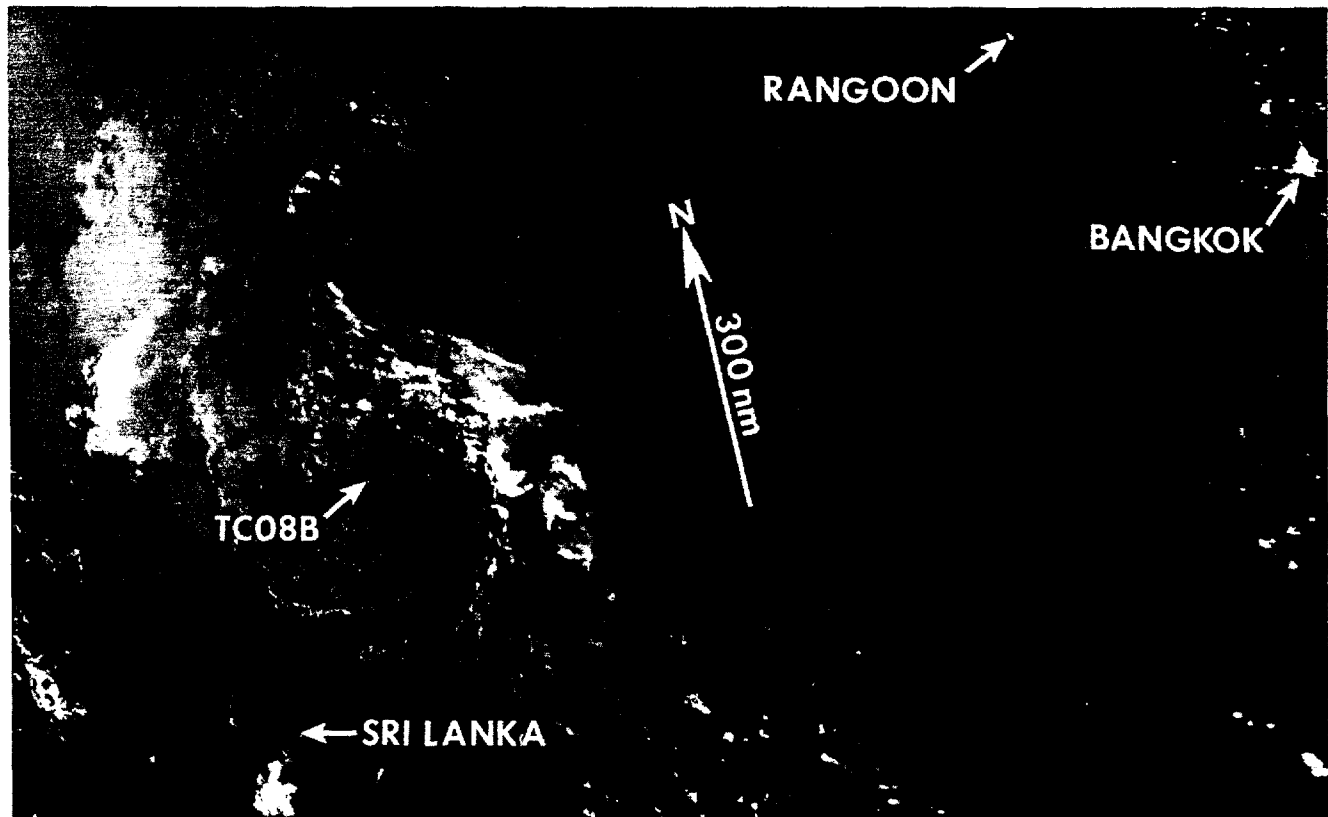


Figure 3-08B-1. Tropical Cyclone 08B was the record-setting eighth significant tropical cyclone to develop in the North Indian Ocean in 1987 and the second system to occur in December. It began as a rapidly organizing tropical disturbance 375 nm (695 km) east of Sri Lanka on the 16th. Tropical Cyclone 08B was mentioned for the first time on the 161800Z Significant Tropical Weather Advisory (ABIO PGTW) and was classified as having fair potential to develop into a significant tropical cyclone based on a low-level cyclonic circulation evident in the synoptic data and an improving upper-level outflow pattern. A Tropical Cyclone Formation Alert (TCFA) was issued the following day at 170800Z when it became apparent the system was increasing in the amount of convection and in organization. Satellite intensity analysis (Dvorak, 1984) estimated 25 kt (13 m/sec) winds at the surface, at that time. The first warning on Tropical Cyclone 08B came six hours later when it developed a central dense overcast and the satellite intensity estimate reached 30 kt (15 m/sec). Tropical Cyclone 08B was initially forecast to move inland near Madras, India and dissipate within 48-hours; however, the system slowed dramatically on the 18th. It changed course at 190000Z and headed toward the northeast. JTWC issued a final warning at 190000Z when it appeared the upper- and lower-level centers had become displaced by strong vertical shear. The exposed low-level circulation center maintained its identity during the subsequent 24-hour period and re-developed its central convection. A second TCFA was issued at 200630Z as the remnants of Tropical Cyclone 08B tracked northeastward and improved in organization. No further warnings were issued, however, despite several satellite intensity estimates of 35 kt (18 m/sec) on the 20th because JTWC believed the intensity was at, or below, warning criteria and not expected to develop further. On the 21st, the tropical cyclone began to weaken and looped unexpectedly back toward the Indian subcontinent (see above imagery). It made landfall on the 23rd on the Indian coast, 165 nm (306 km) south of Madras, India. No reports of major damage or loss of life were received (211229Z December DMSP visual imagery).